

**DO I REALLY NEED YOU? THE IMPACT OF EXTERNAL ADVISORS ON
M&A DYNAMIC CAPABILITIES**

Christian Holländer

Chair of Strategic Management at Goethe University Frankfurt
Address: Theodor-W.-Adorno-Platz 4, 60323 Frankfurt am Main, Germany
E-Mail: hollaender@wiwi.uni-frankfurt.de
Phone: + 49 151 50 462 909 | Fax: +49 2421 770974

Lars Schweizer

Chair of Strategic Management at Goethe University Frankfurt
Address: Theodor-W.-Adorno-Platz 4, 60323 Frankfurt am Main, Germany
E-Mail: l.schweizer@em.uni-frankfurt.de
Phone: +49 69 798 34832 | Fax: +49 69 798 35020

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ABSTRACT External M&A advisors significantly impact a firm's M&A decisions. Do advisors impact just individual M&A projects as one-off events or do they have a lasting impact on a firm's M&A capability in a dynamic M&A environment? Our research attempts to understand the interplay of an internal M&A function and external M&A advisors as antecedents of constantly shaping a firm's M&A approach to suit changing circumstances. This study builds on the concept of dynamic capabilities, enabling an organization to continuously adapt in a dynamic environment. Using survey data from 205 acquirers in the German-speaking countries, we provide evidence for the impact of external advisors on M&A dynamic capability but also highlight their limitations as compared to internal resources. Our research thereby emphasizes external sources' contribution to certain elements of dynamic capabilities but also highlights that dynamic capabilities are idiosyncratic to the firm so that they should not be fully outsourced.

Keywords: M&A function; M&A advisors; dynamic capabilities; structural equation model

INTRODUCTION

External M&A advisors, such as banks or consultants, are a constant companion to a firm's M&A projects with strong influence (Bao and Edmans, 2011; Golubov et al., 2012). In 2021, completed M&A transactions totaled a record \$5.9 trillion globally. M&A advisors consulted on 76% of those deals by transaction value, generating record advisory fees of \$48.5 billion (Thomson Reuters, 2021). When acquirers encounter difficulties from limited target information or project complexity, M&A advisors constitute an important source of M&A competency or acquisition-related information (Sleptsov et al., 2013; Welch Guerra et al., 2020) and significantly impact M&A decisions (Gordon et al., 2019). Recognizing the relevance of advisors for individual M&A projects, Nadolska and Barkema (2014), Trichterborn et al. (2016), and Schriber and Degischer (2020) suggest to extend the analysis to advisors' lasting impact on a firm's M&A management capability. To address those research calls, the study explores the following research question: *Do advisors impact just individual M&A projects as one-time events or does their involvement influence a firm's ability to continuously develop M&A management capability in a dynamic environment with changing circumstances?*

Firms compete in globalized markets and deal with technological and business evolution, forcing them to constantly adapt (Teece, 2007). It is hence not sufficient to just have a desired M&A strategy and required resources in place but to be able to quickly cope with changing conditions. Therefore, firms need to constantly rethink and develop their approach to M&A. The systematic generation, development, and refinement of the competence, which enables a firm to successfully plan and execute M&A, is captured in the concept of dynamic capabilities (Zollo and Winter, 2002). Dynamic capabilities enable a firm to integrate, build, and reconfigure competences to address changing environments (Teece et al., 1997; Teece et al., 2016).

Generally, researchers propose that the necessary managerial activities, that undergird dynamic capabilities, are firm-specific and embedded in its processes, so that they cannot be fully outsourced (Teece, 2007). However, dynamic capabilities exhibit commonalities across firms as there exist more and less effective ways to deal with organizational challenges that must be addressed by specific elements of dynamic capabilities (Eisenhardt and Martin, 2000). Commonalities imply that firms generate dynamic capabilities from different starting points along different paths but that certain elements are widely shared between firms and that best practices are relevant for their development (Barreto, 2010; Peteraf et al., 2013). Extant literature proposes that certain elements of dynamic capabilities can be enabled via external sources through collaboration with other organizations (Døving and Gooderham, 2008), imitation of market actors (Zahra et al., 2006), or the involvement of external consultants (Ambrosini et al., 2009; Narayanan et al., 2009). Dynamic capabilities are directly related to change management and pursuit of best practices, both concerning the core services of advisory practices (Easterby-Smith et al., 2009; Peteraf et al., 2013). Yet, despite the proposed relevance of external advisors for dynamic capabilities, scholars have so far not empirically investigated advisors' impact on a firm's dynamic capabilities (Warner and Wäger, 2019). This research gap motivates us to analyze the impact of external M&A advisors on the development of a firm's M&A dynamic capability.

Hereby, our analysis addresses three contingencies. (1) Researchers suggest to recognize the interplay of both in-house and external M&A resources when analyzing their impact on M&A capability (Nadolska and Barkema, 2014; Sleptsov et al., 2013). We hence investigate the impact of external M&A advisors as a complement to an internal M&A function with respect to the development of M&A dynamic capability. (2) To increase comparability of functional structures for M&A throughout our sample, we recognize for the moderating impact of an M&A function's

organizational positioning as suggested by different scholars (Kale and Singh, 2009; Trichterborn et al., 2016). (3) Our work further adheres to recommendations from Schilke (2014) and Schilke et al. (2018) and differentiates between M&A higher-order and lower-order dynamic capabilities. This allows to achieve a nuanced understanding of the intermediary mechanisms of M&A dynamic capabilities (Easterby-Smith et al., 2009; Fainshmidt and Frazier, 2017). We employ survey data from 205 firms in German-speaking countries to test our hypotheses.

Our study thereby contributes to extant M&A and dynamic capabilities research. It is, to the best of our knowledge, one of the first studies to analyze the concrete impact of external advisors on the development of a firm's dynamic capability (Teece, 2007) and to put those findings into relation with complementing effects of internal organizational mechanisms.

THEORY AND HYPOTHESES

Disentangling the Components of M&A Higher-Order Dynamic Capability

Dynamic capabilities are directed toward aligning a firm with a changing environment (Helfat and Peteraf, 2015). Researchers suggest that there is a hierarchy of different types of dynamic capabilities (Ambrosini et al., 2009; Easterby-Smith et al., 2009; Peteraf et al., 2013; Zahra et al., 2006). To allow for a more nuanced conceptualization, we distinguish between lower-order and higher-order dynamic capabilities (Fainshmidt et al., 2016; Schilke et al., 2018). Lower-order dynamic capabilities allow an organization to adjust its resource base. They operate within existing organizational processes and architecture. Higher-order dynamic capabilities enable firms to adjust their extant set of lower-order dynamic capabilities, reviewing underlying processes and architecture or introducing new approaches (Fainshmidt et al., 2016; Winter, 2003). This allows a firm to change its resource base in a way which is more suitable to changed circumstances (Ambrosini et al., 2009). Researchers mention the '*capability to manage M&A*' as a prime example

of lower-order dynamic capabilities that alter how a firm earns its living (Helfat and Winter, 2011; Schilke, 2014; Schilke and Goerzen, 2010; Winter, 2003). M&A gives a firm access to resources that lie outside of its boundaries (Schweizer, 2005).

Our study investigates a firm's ability to generate, develop, and refine such M&A management capability in the context of changing circumstances. This calls for an analysis of a firm's M&A higher-order dynamic capability. Such a capability enables the firm to constantly adapt its set of lower-order dynamic capabilities for managing M&A to changing conditions.

A practical example of adapting M&A project management capability as a lower-order dynamic capability which has been mentioned repeatedly by practitioners during survey development concerns the introduction of new due diligence and valuation approaches to cope with a newly emerging target universe following technological and market development.

To explore an M&A higher-order dynamic capability, our analysis builds on Teece's (2007) conceptual framework which is the most well-known comprehensive framework for analyzing the foundations of dynamic capabilities (Hodgkinson and Healey, 2011). According to Teece (2007), dynamic capabilities can be analytically broken down into three interrelated capability classes: the capability to (1) sense opportunities and threats, (2) to seize opportunities, and (3) to reconfigure or transform the company's tangible and intangible asset base (SSR capabilities). Following Fainshmidt et al. (2016), we classify the presented SSR capabilities as components of a higher-order dynamic capability that induces generative change. We analyze the capabilities in the context of a firm's continuous adaptation of its '*capability to manage M&A*'.

Sensing new opportunities concerns market-focused scanning, search, and creation activities (Teece, 2007). In our research context, sensing opportunities is directed toward detecting possible improvements of a firm's M&A management capability. *Seizing* captures how firms address

sensed opportunities by making strategic investment decisions or by defining the most suitable approach for capturing detected opportunities (Fainshmidt and Frazier, 2017; Wilden et al., 2013) to prepare for adaptation and change. *Reconfiguring* entails constantly transforming the firm's competences in response to market and technological change to retain evolutionary fit (Helfat and Peteraf, 2015). Continuously reconfiguring competences allows to escape from unfavorable path dependencies in context of changing conditions. The three classes of SSR capabilities are interrelated and complementary (Fainshmidt and Frazier, 2017), so that only in combination they lead to a dynamic capability (Teece, 2007). The level of dynamic capabilities varies across firms and is subject to different antecedents (Eisenhardt and Martin, 2000).

An Internal M&A Function's Impact on an M&A Higher-Order Dynamic Capability

Emergent research suggests an overall positive impact of a dedicated M&A function on deliberate capability development (Schilke and Goerzen, 2010; Trichterborn et al., 2016). To initiate a more fine-grained analysis, we explore the impact of a well-developed M&A function on each of the SSR sub-components of M&A higher-order dynamic capability.

Sensing capability. Having in place a pronounced M&A function positively impacts a firm's sensing capability due to four reasons: *First*, an M&A function as a dedicated unit provides the necessary resources to maintain the permanent alert state that is required for deliberate sensing in a fast-paced environment (Helfat and Peteraf, 2015; Hodgkinson and Healey, 2011). *Second*, its boundary-spanning positioning provides an M&A function with increased exposure to internal changes as well as market developments. *Third*, a unit that pools M&A resources is more alert of operational realities and hence of a firm's need to adapt its M&A management capability as well as of the desired trajectory (Teece, 2007). *Fourth*, constantly dedicated to scanning, an M&A

function provides required experience and capabilities for the correct identification and interpretation of opportunities or patterns (Helfat and Peteraf, 2015). We hence propose:

Hypothesis 1a: An internal M&A function is positively related to a firm's sensing capability.

Seizing capability. Evaluating sensed opportunities in a progressive manner and quickly commit to them requires strong managerial judgement, problem-solving, and decision-making capabilities (Helfat and Peteraf, 2015). Here, an M&A function becomes a repository of experience and capability by virtue of its repeated involvement (Kale and Singh, 2007). As a dedicated structural entity, it has the legitimation to institutionalize a disciplined approach to decision-making (Weber et al., 2019) and to counteract decision-making biases and negative affection toward change (Hodgkinson and Healey, 2011; Loewenstein et al., 2001). Such function is interconnected with relevant units to coordinate information flow (Fainshmidt and Frazier, 2017). We suggest:

Hypothesis 1b: An internal M&A function is positively related to a firm's seizing capability.

Reconfiguring capability. Successful reconfiguration to better match a changed context requires to constantly act on and realize detected improvement opportunities (Teece, 2007). Constantly dedicated to this process, an internal function can develop required specialist knowledge and provide necessary ownership and responsibility (Hodgkinson and Healey, 2011). Reconfiguration imposes strong collaboration requirements as M&A resources tend to be dispersed throughout the firm (Fainshmidt and Frazier, 2017). Serving as an interface, an M&A function is perfectly positioned to induce requisite commitment, cooperation and knowledge exchange among disconnected units (Helfat and Peteraf, 2015). Due to its neutral positioning, such function can also act as a mediator to persuade stakeholders to undertake new initiatives. This allows to overcome resistance to change (Helfat and Peteraf, 2015) in context of an anti-cannibalization bias (Teece, 2007). We hence hypothesize:

Hypothesis 1c: An internal M&A function is positively related to a firm's reconfiguring capability.

External M&A Advisors' Impact on an M&A Higher-Order Dynamic Capability

External M&A advisors support firms in their M&A management on an ad-hoc, temporary basis without being formally recognized within their organizational structure (Bianchi et al., 2016). While their influence on the performance of individual M&A projects has received a fair amount of attention in the literature with mixed results (Golubov et al., 2012; Welch Guerra et al., 2020), insights on their lasting impact on a firm's M&A management capability remain scarce (Trichterborn et al., 2016). Researchers suggest that the exchange with external M&A advisors is seldom limited to a discrete, transactional nature. It rather reflects an ongoing process of developing a working relationship with specific relational resources such as exchange of state-of-the-art knowledge (Gable, 1996; Mors, 2010) and best practices (Peteraf et al., 2013). Dynamic capabilities are directly connected to knowledge creation and change management which is a core business of advisory businesses (Easterby-Smith et al., 2009). Scholars highlight that links to specialized knowledge providers (Teece, 2007) and resource access from social network membership (Adner and Helfat, 2003) are key drivers of dynamic capabilities. Those findings motivate us to analyze if advisors' impact goes beyond providing technical capabilities as a one-time event toward facilitating M&A higher-order dynamic capability which enables the firm to continuously adjust its M&A management capability to changing circumstances.

Sensing capability. Teece (2007) highlights that a firms' sensing process significantly benefits from the inclusion of external sources of search and exploration efforts. Research shows that managers actively try to shield themselves from exposing to information that causes psychological discomfort in light of required change, the so-called 'ostrich effect' (Karlsson et al., 2009).

Managers further tend to converge ideas, limiting variation in generated opportunities. Here, external M&A advisors, that are unbiased and have experience in pattern recognition, can provide a mitigating factor (Helfat and Peteraf, 2015). They are able to update decision makers' mental representations and to regulate emotions (Hodgkinson and Healey, 2011), to push companies to incrementally vary their sensing routines towards their operational needs (Teece, 2007). External M&A advisors do not just provide own knowledge and capabilities (Gable, 1996; Hayward, 2003) but also access to internal and external knowledge exchange networks (Bianchi et al., 2016). Higher knowledge variety leads to better opportunity detection and interpretation (Rodan and Galunic, 2004). We propose:

Hypothesis 2a: The involvement of external M&A advisors is positively related to a firm's sensing capability.

Seizing capability. Established firms tend to frame new problems in a manner consistent with the firm's established knowledge base or heuristics (Adner and Helfat, 2003; Kor and Mesko, 2013). Resulting framing biases can be mitigated by external advisors, that possess strong decision-making and problem-solving capabilities (McDonald et al., 2008). Advisors are able to rely on their networks to assess information (Mors, 2010). This allows to integrate specialized knowledge and cognitive diversity (Bianchi et al., 2016; Sleptsov et al., 2013) for better opportunity evaluation (Rodan and Galunic, 2004) and decision-making (McDonald et al., 2008). When managers cling to established M&A approaches and resist adaptation initiatives (Hodgkinson and Healey, 2011), obtaining an objective outside view can mitigate the impact of affection to existing approaches (Loewenstein et al., 2001). We suggest:

Hypothesis 2b: The involvement of external M&A advisors is positively related to a firm's seizing capability.

Reconfiguring capability. Reconfiguring efforts require the capability to coordinate and execute corporate change which is a focus area of advisory businesses (Ambrosini et al., 2009). When a firm's resources become overstrained, external advisors provide relevant capabilities and resources (Hodgkinson and Healey, 2011). Further, exposure to more knowledge diversity and dissimilar perspectives improves managers' ability to implement ideas and execute complex tasks (Rodan and Galunic, 2004). An organization-wide change initiative must be supported by concerned stakeholders. Achieving a buy-in is more likely if internal promoters for change can draw on external specialist advocates. As advisors have relevant knowledge and experience to testify the soundness of a new idea, their involvement raises an initiative's credibility and legitimacy. It can reconcile resistance to change (Rodan and Galunic, 2004). Thus:

Hypothesis 2c: The involvement of external M&A advisors is positively related to a firm's reconfiguring capability.

The Moderating Effect of an M&A Function's Organizational Positioning

External M&A advisors often have direct CEO access (Gordon et al., 2019). A comparison of the dynamic capabilities impact of advisors vis-à-vis an internal M&A function should therefore consider a function's organizational positioning to control for its influence on key decision makers. Researchers show that the impact of organizational actors on capabilities depend on their hierarchical positioning within the firm (Gavetti, 2005; Martin, 2011). A better hierarchical positioning impacts social capital (Adner and Helfat, 2003). Social capital is found to positively impact dynamic capabilities (Adner and Helfat, 2003; Kor and Mesko, 2013). In this vein, Kale and Singh (2009) as well as Trichterborn et al. (2016) highlight the need to recognize the positioning of an internal function when investigating its capabilities' impact. Following extant

literature (Patel and Cooper, 2014; Preston et al., 2008; Schminke et al., 2002), we investigate an M&A function's positioning in the context of its number of reporting levels to the firm's CEO.

Sensing capability. An M&A function's more direct CEO reporting line provides authority (Helfat and Peteraf, 2015) to ensure an alert state of attention to screening M&A improvement opportunities within the firm, driving a continuous scanning effort within other units (Ambrosini et al., 2009). A more direct reporting facilitates information flow from market reality to decision makers and minimizes information decay (Teece, 2007). We expect:

Hypothesis 3a: The lower the number of reporting levels to the CEO, the higher an M&A function's positive impact on a firm's sensing capability.

Seizing capability. Expertise has the greatest effect on a group's decision quality when high-expertise group members have a strong influence on decision-making (Bianchi et al., 2016). In the absence of status cues, groups tend to decide based on knowledge that they have already in common, resulting in hampered innovation. A lower number of reporting levels to the CEO is a determinant of an M&A function's structural power (Preston et al., 2008). Ensuring a potent impact on decision-making, structural power enables a function to better integrate capabilities into the seizing process. It allows to drive intrafirm commitment toward change (Fainshmidt and Frazier, 2017). We suggest:

Hypothesis 3b: The lower the number of reporting levels to the CEO, the higher an M&A function's positive impact on a firm's seizing capability.

Reconfiguring capability. M&A is an organization-wide activity. Hence, an M&A function's ability to initiate and coordinate adaptation and change of a firm's M&A approach throughout the organization is dependent on its intrafirm authority (Hodgkinson and Healey, 2011). A more direct CEO reporting provides the necessary legitimation to coordinate reconfiguration efforts and secure

commitment from involved units (Fainshmidt and Frazier, 2017). It enables the function to act as a catalyst to continuously shape and renew a firm's M&A management capability. It further allows to incorporate continuous feedback loops with decision makers between reconfiguring efforts, increasing acceptance (Helfat and Peteraf, 2015). We hence propose:

Hypothesis 3c: The lower the number of reporting levels to the CEO, the higher an M&A function's positive impact on a firm's reconfiguring capability.

The Role of an M&A Lower-Order Dynamic Capability

Introducing a hierarchical distinction of dynamic capabilities enhances precision by specifying what the respective capability aims to change (Peteraf et al., 2013; Schilke, 2014). So far, there is a lack of empirical work investigating the interconnection between higher-order and lower-order dynamic capabilities (Schilke, 2014). Operating within established processes and architecture, lower-order dynamic capabilities allow a firm to reconfigure its stock of resources (Fainshmidt et al., 2016; Winter, 2003). Higher-order dynamic capabilities enable the renewal and adaptation of extant lower-order dynamic capabilities when conditions change and existing capabilities are perceived to insufficiently or inappropriately impact a firm's resource base (Ambrosini et al., 2009; Schilke, 2014). Higher-order capabilities thus govern the rate at which lower-order capabilities adjust to market requirements (Mikalef and Pateli, 2017). We suggest:

Hypothesis 4: An M&A higher-order dynamic capability is positively related to M&A lower order dynamic capability.

M&A Management Capability as a Prime Example of Lower-Order Dynamic Capability

The '*capability to manage M&A*' serves as a prime example of a lower-order dynamic capability that allows to adjust resources via M&A (Helfat and Winter, 2011; Schilke, 2014; Winter, 2003). Extant research has operationalized an M&A higher-order dynamic capability in terms of

deliberate learning capability to illustrate the M&A performance impact (Trichterborn et al., 2016; Zollo and Winter, 2002). The established theoretical link between M&A deliberate learning and M&A performance in those studies is the development of a capability to better manage M&A projects (Trichterborn et al., 2016). Yet, no study has conceptualized or measured so far, which specific elements constitute an M&A project management capability. Here, a better understanding is important, given that M&A project management is a suggested key driver of M&A performance that is yet often neglected in the literature (Meckl, 2004). We introduce key elements of an M&A management capability to better understand *first* the specific consequences of an M&A higher-order dynamic capability and *second* the concept of lower-order dynamic capability in an M&A context. We argue that firms with strong M&A management capability possess routines that allow for an effective M&A project management (Schilke and Goerzen, 2010). In line with Trichterborn et al. (2016), we employ findings from alliance literature to explore M&A management capability. We adapt and validate Schilke and Goerzen's (2010) alliance management capability scale to an M&A context. As per their definition, an M&A management capability is "*a type of dynamic capability with the capacity to purposefully create, extend, or modify the firm's resource base, augmented to include the resources*" (Schilke and Goerzen, 2010, p. 1195) of acquired targets.

Schilke and Goerzen (2010) present five dimensions of an alliance management capability: (1) alliance portfolio coordination, (2) interorganizational learning, (3) alliance proactiveness, (4) interorganizational coordination, and (5) alliance transformation, which in fact represents alliance flexibility when considering description and individual indicators of the used construct.

We adapt this scale toward an M&A project management context, relying on extensive pretesting with academics and practitioners in the form of interviews, scale discussions, and observed scale completions. *First*, as our sample is not only limited to systematic acquirers, an

M&A portfolio coordination dimension is not suitable and hence excluded. *Second*, as we do not focus just on R&D and knowledge-searching acquirers, inter-organizational learning is not necessarily a central M&A goal for each sample firm and hence not included as an always suitable measure for M&A management capability. Beyond that, learning from a target mainly takes place after its integration, which is driven more by concerned business units than the analyzed M&A functions (Meckl, 2004; Trichterborn et al., 2016). *Third*, we acknowledge the importance of a coordination dimension for M&A as a firm-wide activity. Yet, not focusing on integration-specific metrics, we suggest that measuring intraorganizational coordination is a more adequate coordination metric in an M&A project management context. The analyzed dimensions of an M&A management capability then include (1) M&A project proactiveness, (2) M&A project coordination, and (3) M&A project flexibility. Each dimension is suggested to contribute toward an appropriate realization of M&A projects with beneficial performance effects.

M&A project proactiveness. Higher-order dynamic capability improves the agility with which a firm can capitalize on market opportunities (Lu and Ramamurthy, 2011; Mikalef and Pateli, 2017). Early movers tend to outperform later ones in M&A (Haleblian et al., 2012). M&A proactiveness allows firms to preempt rivals by building relationships and positioning themselves to better serve interesting targets. Early movers tend to act on asymmetric information over competitors, therefore being able to (1) acquire targets at lower price before their full value is known to the market, (2) select higher quality targets and (3) choose targets that better seize a firm's synergy potential; all related to the ability to choose from a larger target pool (McNamara et al., 2008).

M&A project coordination. The complexity of M&A projects imposes strong coordination requirements. M&A-related information, participants, and activities are dispersed over the organization and need to be harmonized. Hence, intraorganizational coordination is a central

challenge of M&A project management (Meckl, 2004). M&A project coordination ensures that firm-wide project tasks are governed efficiently. This allows to synchronize activities and avoid conflicts or redundancies among units (Mikalef and Pateli, 2017). The consequence is better collaboration with beneficial performance effects (Hoegl et al., 2004).

M&A project flexibility. The value of a higher-order dynamic capability can further be assessed in terms of a firm's reactive agility to adjust to changing conditions (Lu and Ramamurthy, 2011; Mikalef and Pateli, 2017). An early commitment in M&A market movements may be subject to drawbacks when conditions change (McNamara et al., 2008). A cure to these downsides is a firm's flexibility in handling M&A projects to quickly adapt an M&A project's setup and address unexpected changes (Lu and Ramamurthy, 2011).

Taken together, we rely on the work by Schilke and Goerzen (2010) and present three dimensions of an M&A management capability with suggested beneficial performance impact. Those dimensions of an M&A management capability are both specific enough to measure the capability to manage M&A projects and general enough to allow to recognize M&A projects' heterogeneity. Figure 1 presents our research model.

Insert Figure 1 about here

METHODS

Data

Our sample consists of companies from the German-speaking countries in Europe, that had made at least two acquisitions of a controlling interest in an acquired firm between January 2012 and April 2016 and that maintain a dedicated M&A function. We focused on German-speaking

participants to avoid translation issues and to limit the heterogeneity of the participants' M&A playing field with respect to legal and institutional characteristics (Bauer et al., 2016). Our timespan ensured a strong link between the analyzed firm's present structures and processes. As we collected survey data from May to December 2016, the chosen time frame allowed us to reduce risk of retrospective bias (Bauer et al., 2016) and increase the likelihood that managers who were involved in a firm's M&A projects were still accessible. Relevant acquisitions of a controlling interest were identified based on the Thomson ONE database (2021) with minimum deal value of US\$1 million, checked and refined with information from Mergermarket. We excluded acquisitions from the real estate sector because most targets were real estate portfolios and did not match strategic investment criteria. Due to this reason, transactions from financial acquirers were excluded as well. Since our analysis focusses on the impact of external advisors in presence of a dedicated M&A function, we relied on survey data only from firms that maintain a dedicated M&A function. To increase response rate and quality, we focused on companies for which M&A plays a significant role in their strategy. Firms that perform M&A on a regular basis are also more likely to build up an M&A function than other firms (Trichterborn et al., 2016). Therefore, we included firms that made at least two acquisitions between January 2012 and April 2016. A sample firm, possibly having done multiple acquisitions, was then included only once in the sample, to switch from an acquisition to an acquirer level. From the original 6,045 acquisitions, we excluded 319 acquisitions from real estate companies and 1,399 acquisitions from financial investors. Further, we excluded 14 government agency acquisitions and 17 acquisitions from today insolvent firms and 2,255 acquisitions from companies that acquired only one company during the observation period resulting in 2,041 acquisitions and a sample size of 658 firms. Via the online business networks "*LinkedIn*" and "*Xing*" we identified appropriate

contacts within the sample firms, such as the firms' M&A managers. To obtain high-quality responses and to reduce key informant bias, the detected contacts were reached via telephone to ensure that the most knowledgeable person completed the survey. Contact persons of 189 firms refused to participate and the survey was sent to 404 firms. We received 215 completed surveys, leading to an above-average response rate of 53.2 percent. Given that we wanted to analyze the impact of M&A advisors in the presence of an M&A function, we further excluded 10 companies that did not have any form of a dedicated inhouse resource for M&A in place, providing a final sample of 205 firms. Respondents include heads of M&A (33.7%), M&A managers (41.1%), business development or strategy heads (2.5%), employees within business development/strategy (5.0%), or finance departments (5.4%), and managers from other functions (12.4%) who are dedicated to M&A. Sample characteristics are depicted in Table I. We observed no significant difference between early and late respondents, indicating that non-respondent bias was not a problem.

Insert Table I about here

Measures

We only utilized established measurement scales from the literature to increase validity and reliability of results (cf. Appendix A). Scale items were measured on a seven-point Likert-type scale. We created a survey which was translated and back-translated to confirm item consistency.

Internal M&A function. We refer to Schilke and Goerzen's (2010) work to measure how pronounced a sample firm's internal M&A function is. The items gauge the degree to which the firm has one or more specialized departments or personnel that are only dedicated to M&A.

External M&A advisors. We measured the involvement of external M&A advisors based on the work of Westphal (1999) and Andrews and Smith (1996). The items measure the degree of involvement of external M&A advisors both within and outside of sold consulting projects.

Number of reporting levels to CEO. We follow researchers who use the number of reporting levels to the CEO as a metric for the hierarchical positioning (Schminke et al., 2002) and implied structural power (Patel and Cooper, 2014; Preston et al., 2008). We measured the number of reporting levels between the CEO and an M&A function's head and reverse-coded this number.

M&A higher-order dynamic capability. The operationalization of M&A higher-order dynamic capability is based on Wilden et al.'s (2013) work. To recognize for the M&A context, we slightly modified their measure, relying on pretesting with academics and practitioners in the form of structured interviews, survey discussions, and observed survey completions. As per Fainshmidt et al. (2016), the SSR measure from Wilden et al. (2013) is a metric of higher-order dynamic capabilities, reflecting a generative, rather than just an adaptive capacity to transform lower-order capability. The constituting sensing, seizing, and reconfiguring sub-components of an M&A higher-order dynamic capability are reflectively measured latent variables. Measures for seizing and reconfiguring build on the work of Wilden et al. (2013). The scale for sensing is based on Wilden et al. (2013) and Danneels (2008). SSR sub-components are complementary (Fainshmidt and Frazier, 2017; Teece, 2007) and subject to different antecedents (Helfat and Peteraf, 2015; Martin, 2011). As per Wilden et al. (2013), we thus operationalized an M&A higher-order dynamic capability with a Type II multi-dimensional second-order construct (reflective-formative type).

We model the impact of an M&A function and advisors on M&A higher-order dynamic capability at the disaggregate formative indicator level (i.e. sensing, seizing, reconfiguring), as

opposed to the aggregate formative latent variable level (higher-order capability), since antecedents may not influence indicators the same way (Cadogan and Lee, 2013).

M&A lower-order dynamic capability. We rely on Schilke and Goerzen's (2010) suggested alliance management capability metric to identify the dimensions of an appropriate measure of M&A management capability as a lower-order dynamic capability. We take a specific angle of managing individual M&A projects to provide study participants with tangible measurement items. M&A project proactiveness is measured with Schilke and Goerzen's (2010) metric of alliance proactiveness, adapted toward an M&A context. M&A project coordination is measured via a scale developed by Hoegl et al. (2004) as it fits best concerned M&A project context. This measure captures the quality of coordination between units involved in M&A. M&A project flexibility is adapted from scales of Schilke and Goerzen (2010) as well as Gibson and Birkinshaw (2004). This construct measures flexibility to changing conditions in an M&A project context.

Control variables. We include controls for the three dimensions of M&A lower-order dynamic capability. We included firm size because larger organizations might be more likely to use more sophisticated M&A practices. Firm size was measured by revenues and the number of employees, with each indicator categorized within a seven-point Likert scale (Trichterborn et al., 2016). We controlled for M&A experience, measured by the number of acquisitions in the last five years (Trichterborn et al., 2016). We controlled for industry effects by means of an industry classification as per the Global Industry Classification Standard (GICS) from 1999. Proposed 24 industry groups were consolidated into six sectors: (1) energy & utilities, (2) materials, engineering & construction, (3) industrials, (4) consumer & retail, (5) technology, media & telecoms and (6) health care.

ANALYSIS AND RESULTS

We used the partial least squares approach to analyze our structural equation model. A PLS approach is well suited since our research area is unexplored, the data sample relatively small, and since the research model incorporates reflective and formative measurement scales (Chin, 1998; Hair et al., 2011). We employed SmartPLS 3.0 to test our hypotheses (Ringle et al., 2015).

Measurement Model

To meet indicator reliability requirements of the reflective measurement scales, some measurement items with loadings of less than 0.7 were eliminated (Lowry and Gaskin, 2014). All indicator loadings on their theoretical constructs are significant at the 0.001 level. The average variance extracted (AVE) of all reflective constructs is higher than the recommended threshold of 0.5 (Fornell and Larcker, 1981), indicating convergent validity of the reflective measurement scales (cf. Table II). Discriminant validity was assessed by examining the items' cross-loadings. All items correlate best with their intended constructs (Chin, 1998) and cross-loading differences are higher than the threshold of 0.1 (Gefen et al., 2011). The square root of the AVE of each construct exceeds all respective horizontal and vertical interconstruct correlations (cf. Table II), thus meeting the Fornell–Larcker criterion (Fornell and Larcker, 1981). Discriminant validity was further confirmed as the heterotrait-monotrait ratio of correlations (HTMT) was below the threshold of 0.9 (Henseler et al., 2015). Construct reliability was ensured, as composite reliability (CR) and Cronbach's alpha were above commonly accepted thresholds of 0.7 and 0.7 (Chin, 1998).

Insert Table II about here

A variance inflation factor (VIF) analysis of the first-order constructs shows that all VIF are below the commonly accepted threshold of 5 (VIF = 1.72 for sensing, VIF = 1.89 for seizing, VIF = 1.39 for reconfiguring capability), indicating no collinearity problems of the measurement scales.

Structural Model and Hypotheses Testing

We investigated significance levels of hypothesized relationships and R^2 -values to determine how well the structural model fitted to the sample data. To determine significance levels of beta coefficients, we conducted a bootstrapping analysis with 5000 subsamples and a sample of 205 firms (Hair et al., 2013). The best fit between data and model is shown in Figure 2. According to Cording et al. (2008) and Hair et al. (2017), there are no overall goodness-of-fit statistics for a PLS model. Instead, the coefficient of determination R^2 is considered for evaluation purposes. The coefficients of determination for M&A project proactiveness ($R^2=0.34$), coordination ($R^2=0.16$), and flexibility ($R^2=0.24$) indicate an appropriate explanatory power of our model, considering the multifaceted drivers of M&A management capability. This holds true for the first-order scales of M&A higher-order dynamic capability for sensing ($R^2=0.25$), seizing ($R^2=0.19$), and reconfiguring capability ($R^2=0.13$). Positive Stone-Geisser test values (Q^2) confirmed the model's predictive relevance (Geisser, 1975).

Insert Figure 2 about here

A more pronounced internal M&A function is positively associated with all three first-order dimensions of an M&A higher-order dynamic capability: sensing ($\beta = 0.45$, $p < 0.01$), seizing ($\beta = 0.33$, $p < 0.01$), and reconfiguring capability ($\beta = 0.29$, $p < 0.01$). Our results indicate support for Hypotheses 1a, 1b, and 1c. A stronger involvement of external M&A advisors is positively

related to sensing ($\beta = 0.18, p < 0.01$) and seizing capability ($\beta = 0.19, p < 0.01$), thereby providing support for Hypotheses 2a and 2b. The direct relationship between external M&A advisors and reconfiguring capability is insignificant. We hence do not find empirical support for Hypothesis 2c. A lower number of reporting levels to the CEO positively moderates an internal M&A function's impact on seizing capability (H3b: $\beta = 0.19, p < 0.05$) and on reconfiguring capability (H3c: $\beta = 0.21, p < 0.01$). We do not find support for a moderating effect on the relation between an M&A function and sensing capability (Hypothesis 3a). An M&A higher-order dynamic capability is positively related to the analyzed three aspects of an M&A lower-order dynamic capability – M&A project proactiveness ($\beta = 0.42, p < 0.01$), coordination ($\beta = 0.37, p < 0.01$), and flexibility ($\beta = 0.47, p < 0.01$), supporting Hypothesis 4. Interestingly, firm size is negatively related to M&A project proactiveness ($\beta = -0.35, p < 0.01$) while M&A experience is positively related ($\beta = 0.22, p < 0.01$). The results are shown in Appendix B.

Mediation analysis. We conducted a bootstrapping mediation approach (Hayes, 2013, p. 116; Zhao et al., 2010) and assessed indirect effects, which are stated in Table III (Lowry and Gaskin, 2014). We observe a significant indirect effect of both an internal M&A function and external M&A advisors through M&A higher-order dynamic capability on all three elements of M&A management capability (M&A project proactiveness, coordination, and flexibility).

Insert Table III about here

Additional analysis. We analyze the moderating impact of M&A advisors on the relationship between an M&A function and the SSR sub-components of M&A higher-order dynamic capability and do not observe any significant impact. Further, we do not find support for a significant direct

impact of either an M&A function or M&A advisors on the elements of M&A management capability. This shows that their impact is mainly indirect, by impacting the SSR sub-components of an M&A higher-order dynamic capability.

Analysis of the M&A Performance Impact by an M&A Management Capability

We suggest a positive performance effect of the three elements of an M&A management capability. While our focus lies on the interrelation between higher- and lower-order dynamic capabilities, we want to confirm the elements' beneficial performance effects by integrating M&A performance into our structural equation model.

Measure. We employed Lechner et al.'s (2010) construct for measuring the performance of strategic initiatives, including acquisitions (Lechner and Floyd, 2012). We adapted this construct to recognize for the M&A context. A managerial self-assessment of M&A performance is in line with prior research (Bauer et al., 2016; Capron, 1999; Trichterborn et al., 2016). It has benefits to other measures, especially to a one-dimensional assessment, as it allows to capture fine-grained mechanisms as well as aspects which are dependent on post-merger integration (Capron, 1999). We confirmed convergent and discriminant validity ($AVE = 0.62$) as well as reliability (Cronbach's Alpha = 0.90, Composite Reliability = 0.92) of the construct. We illustrate the measurement scale and construct items, all significant at the 0.001 level, in Table IV.

Insert Table IV about here

To assess the reliability of key informants, we asked all participants for the email address of a knowledgeable colleague to fill out a separate survey regarding M&A performance. We received 53 (25.9% of total sample) completed second surveys and calculated intraclass correlation

coefficients (ICCs) to assess the reliability of key informants. Given that individual ratings are not aggregated in this study, ICC (1) was used for our study (Bliese, 2000). We calculated ICC (1) as matched pairs of the data from the first and second respondent for each performance indicator. As shown in Appendix C, all ICC (1) are clearly above the threshold of 0.25, indicating sufficient consistency among the different raters (LeBreton and Senter, 2008). A Lindell & Whitney (2001) marker variable analysis with a conceptually unrelated variable supports this finding.

Control variables. We controlled for factors that can influence M&A performance. On a transaction level, we controlled for the relative size of an acquired target (Vaara et al., 2014). It was measured by a target's pre-deal revenues relative to the acquirer. To account for deal complexity, we controlled for a target's pre-acquisition relatedness with respect to products, technology, geography, and customers (Capron, 1999). Following Vaara et al. (2014), we considered the time elapsed since an evaluated acquisition. Controls on an acquirer level are consistent with the ones that were used to analyze antecedents of an M&A management capability (acquirer size, M&A experience, and industry).

Results. The established model explains 46.6% of the variation in M&A performance ($R^2=0.47$, $Q^2=0.26$), which is very appropriate, compared with similar studies (Lechner et al., 2010; Lechner and Floyd, 2012; Trichterborn et al., 2016). M&A proactiveness ($\beta = 0.16$, $p < 0.05$), coordination ($\beta = 0.32$, $p < 0.01$) and flexibility ($\beta = 0.21$, $p < 0.01$) are all positively associated with M&A performance. M&A higher-order dynamic capability is positively related to M&A performance ($\beta = 0.17$, $p < 0.05$). From employed controls, only relative target size significantly impacts M&A performance ($\beta = 0.09$, $p < 0.1$). Interestingly, the effect of M&A experience is insignificant.

The indirect relation of an M&A higher-order dynamic capability and M&A performance is significant ($\beta = 0.28$, $p < 0.0$). Considering the measured significant direct impact of an M&A

higher-order dynamic capability on M&A performance, the results suggest partial mediation by the elements of M&A lower-order dynamic capability which is in line with other research on the impact of dynamic capabilities (Ambrosini et al., 2009; Fainshmidt et al., 2016; Schilke, 2014).

DISCUSSION

Do external advisors affect just the performance of individual M&A projects as one-time events or do they impact a firm's ability to continuously develop its M&A management capability in a dynamic setting? Hence, do advisors have a lasting impact on a firm's capability to manage M&A? Our study provides insight into this research question by providing evidence on how external advisors complement an internal M&A function to impact a firm's M&A dynamic capabilities.

Implications for Research

Adopting a capability-based view of M&A, our research contributes to M&A and dynamic capabilities research in three areas: *First*, our explicit analysis of the impact of both internal and external organizational resources on the introduced SSR capabilities adds to the literature on microfoundations of dynamic capabilities (Danneels, 2008; Fainshmidt and Frazier, 2017; Gavetti, 2005). We show that both an internal M&A function and external M&A advisors positively impact a firm's sensing capability (Hypotheses 1a & 2a). Our findings are in line with Teece (2007) who argues that the recurrent synthesis of new information from environmental scanning should be embedded in internal structures. Yet, our results also highlight the significant role of external advisors in directing a firm's awareness toward its operational needs and providing required resources and network relationships (Bianchi et al., 2016; Gable, 1996; Hayward, 2003). Our findings further indicate that both organizational mechanisms are positively related to a firm's seizing capability (Hypotheses 1b & 2b). An internal M&A function is capable to evaluate opportunities in the firm's specific context and to coordinate internal decision-making. Involving

external M&A advisors still is beneficial by providing an objective outside view (Teece, 2007) and relevant expertise to improve decision-making (McDonald et al., 2008). We find a significant impact on a firm's reconfiguring capability only for an internal M&A function (Hypothesis 1c) and not for external M&A advisors. Hence, our findings do not support Hypothesis 2c. There are several explanations for this finding. First, reconfiguration efforts focus on a firm's internal affairs. They impose strong internal coordination requirements (Helfat and Peteraf, 2015) and require deep knowledge of organizational realities as well as strong intrafirm networks (Fainshmidt and Frazier, 2017). Being external to the firm, M&A advisors are not able to provide either required constant attention or intraorganizational networks and intimate knowledge of the firm and its ecosystem to fulfill this task. Beyond this, reconfiguring efforts can impose considerable resistance to change (Hodgkinson and Healey, 2011). Group-focus emotions prompt managers to show resistance to change initiatives which are driven by external actors (Karlsson et al., 2009). This limits the impact of M&A advisors on reconfiguration efforts and increases an M&A function's relevance.

Taken together, our results suggest that external M&A advisors can facilitate a firm's dynamic capability only in collaboration with the firm's internal resources. The findings are in line with research that suggests that the managerial activities, that undergird dynamic capabilities, need to be embedded in a firm's processes to be repeatable (Helfat and Peteraf, 2003). However, we show that external advisors can positively impact certain elements of dynamic capabilities, as suggested by extant literature (Ambrosini et al., 2009; Narayanan et al., 2009; Zahra et al., 2006).

Second, our paper extends research on internal functional structures for strategic initiatives (Kale and Singh, 2007, 2009; Trichterborn et al., 2016). We show that an M&A function's organizational positioning significantly moderates the function's impact on M&A higher-order dynamic capability. While we do not find support for a moderating effect of the number of

reporting levels to the CEO on an M&A function's impact on sensing capability (Hypothesis 3a), we do find support for a moderating effect on seizing (Hypothesis 3b) and reconfiguring capability (Hypothesis 3c). An M&A function can sense opportunities relatively independently of CEO interaction. Sensing activities often require small resource commitments but continuous real-time adjustments, so that they are best undertaken directly at the functional unit level. In contrast, seizing and reconfiguring activities require larger-scale transformative resource allocations and reconfigurations, that relevant decisions are made primarily at the corporate center level (Martin, 2011). Hence, an M&A function requires mechanisms that secure sufficient influence to integrate its expertise and capitalize on sensed opportunities to then drive a continuous transformation effort.

Third, we contribute to the literature on the hierarchical ordering of dynamic capabilities (Ambrosini et al., 2009; Easterby-Smith et al., 2009; Zahra et al., 2006). We follow prior research calls (Fainshmidt et al., 2016; Peteraf et al., 2013; Schilke, 2014; Schilke et al., 2018; Wilden et al., 2013) and conceptually and empirically investigate the interrelation between higher-order and lower-order dynamic capabilities. Building on extant research (Helfat and Winter, 2011; Schilke, 2014; Winter, 2003), we suggest that an M&A management capability is a prime example of a lower-order dynamic capability which enables a firm to reconfigure its resource base via the acquisition or disposal of assets (Haleblian et al., 2009). Following Schilke and Goerzen (2010), we conceptualize three dimensions of an M&A management capability, taking an M&A project level perspective: (1) M&A project proactiveness, (2) M&A project coordination, and (3) M&A project flexibility. Our results indicate a positive performance impact of each M&A management capability dimension. Introduced conceptualization provides evidence that M&A higher-order dynamic capability generates M&A performance benefits by positively affecting M&A lower-order dynamic capability in form of a partial mediation model. An M&A higher-order dynamic

capability then impacts M&A performance by generating and shaping a valuable M&A lower-order dynamic capability toward better fit with external conditions (Schilke, 2014).

Implications for Management

We show that the interaction with M&A advisors can facilitate a firm's effort to adapt its M&A management capability to changing circumstances. We thereby illustrate the relevance of M&A advisors beyond the support of individual M&A projects. Our results indicate benefits of nurturing an active advisor network and not limiting interaction to temporary projects on an ad-hoc basis.

When managerial resources are overloaded, external advisors provide a means to access additional knowledge exchange networks and decision making support (Bianchi et al., 2016) to detect, decide and also act upon specific improvements to M&A management capability. Yet, we show that a sustainable reconfiguration of a firm's M&A management capability in a dynamic setting requires dedicated internal resources that provide constant attention to coordinate a continuous change process. Illustrating the benefits of an M&A function for the continuous advancement of M&A management capability in a dynamic setting, our work advocates for required investments to set up such dedicated M&A function. We show that a more direct reporting line to the CEO is a potent antecedent of a function's ability to drive adaptation and change.

Future Research

There are a few conceptual and methodological limitations in our study that should be addressed as part of future research. From a conceptual perspective, services from external M&A advisors can significantly differ. Incorporating the nature of advisory services and the level of client-advisor relationship would improve the understanding of external advisors' specific role. Future studies should factor in additional characteristics of external advisors and the employed services to account for their variety. Future research should further investigate the nature of collaboration

both inside but also outside of contracted M&A projects. Researchers should also analyze the impact of advisors for firms that do not have any dedicated M&A resources in place. Further, our conceptualization of an M&A management capability is based on an established theoretical construct. Yet, the underlying elements should not be considered exhaustive, considering our focus on the management of individual M&A projects. Future research should build on our work and further advance the understanding of key dimensions of an M&A management capability.

From a methodological perspective, our assertions refer to a cross-sectional dataset. It would be interesting to see how internal and external organizational mechanisms affect dynamic capability over time. Further, the analyses draw on key informant survey data, given the high level of sensitivity around M&A information. Using multiple informants from other functions or business areas as well as secondary data should help to validate our findings.

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Table I: Sample Composition (Total Sample n = 205)

Industry	%	Number of employees	%	Turnover in million €	%	Number of acquisitions ^a	%
Technology, media & telecoms	22%	> 50,000	14%	> 5,000	27%	2	7%
Materials, engineering & construction	20%	20,001 – 50,000	13%	1,001 – 5,000	40%	3 – 4	19%
Other industrials	20%	10,001 – 20,000	18%	501 – 1,000	15%	5 – 6	24%
Consumer & retail	16%	5,001 – 10,000	18%	201 – 500	10%	7 – 8	9%
Health care	11%	1,001 – 5,000	28%	101 – 200	3%	9 or more	42%
Energy & utilities	8%	501 – 1,000	6%	10 – 100	4%		
Others	3%	< 500	3%				

a. Past 5 years.

Table II: Correlation and Square Root of Average Variance Extracted (AVE)

Constructs	1	2	3	4	5	6	7	8	9
(1) Internal M&A function	0.82								
(2) External M&A advisors	0.12	0.81							
(3) Sensing capability	0.46	0.23	0.79						
(4) Seizing capability	0.32	0.24	0.63	0.79					
(5) Reconfiguring capability	0.28	0.12	0.43	0.51	0.86				
(6) M&A project proactiveness	0.16	-0.04	0.30	0.38	0.33	0.81			
(7) M&A project coordination	0.11	0.08	0.37	0.37	0.14	0.25	0.87		
(8) M&A project flexibility	0.15	0.04	0.34	0.51	0.28	0.35	0.50	0.84	
(9) Company size	0.39	0.02	0.20	0.07	0.04	-0.21	-0.01	-0.01	0.94
Average variance extracted (AVE)	0.67	0.66	0.65	0.63	0.75	0.65	0.75	0.70	0.88
Composite reliability	0.86	0.89	0.89	0.87	0.92	0.88	0.92	0.90	0.94
Cronbach's alpha	0.75	0.84	0.85	0.80	0.89	0.82	0.89	0.86	0.87

N = 205.

Table III: Indirect Effects

Path from	to	Path coefficients		Confidence intervals	
		B	T-values	2.50%	97.50%
Internal M&A function	M&A higher-order dynamic capability	0.43***	7.73	0.31	0.53
	M&A project proactiveness	0.18***	4.59	0.11	0.27
	M&A project coordination	0.16***	4.12	0.09	0.24
	M&A project flexibility	0.20***	5.00	0.12	0.28
External M&A advisors	M&A higher-order dynamic capability	0.18***	3.21	0.06	0.28
	M&A project proactiveness	0.08***	2.83	0.03	0.13
	M&A project coordination	0.07**	2.54	0.02	0.12
	M&A project flexibility	0.09***	2.89	0.03	0.14

Note: Stated confidence intervals are bias-corrected.

n/s = not significant ($p > 0.10$).

* Significant at $p < 0.10$.

** Significant at $p < 0.05$.

*** Significant at $p < 0.01$.

Table IV: Reflective Measurement Items and Loadings

Construct	Measurement items	Loadings
M&A performance		
<i>(Lechner et al., 2010)</i>	Please assess the performance of your last completed M&A project, on each of the following dimensions:	
	1. Meeting M&A process efficiency parameters.	0.80
	2. Meeting overall M&A transaction objectives.	0.77
	3. Meeting overall M&A process quality parameters.	0.79
	4. Dealing with M&A process obstacles.	0.81
	5. Meeting budget expectations.	<i>eliminated</i>
	6. Meeting time expectations.	<i>eliminated</i>
	7. Meeting staffing / resource allocation goals.	0.80
	8. Meeting internal stakeholder satisfaction objectives.	0.84
	9. Meeting external stakeholder satisfaction objectives (customers, suppliers, partners, etc).	0.71

Figure 1: Research Model

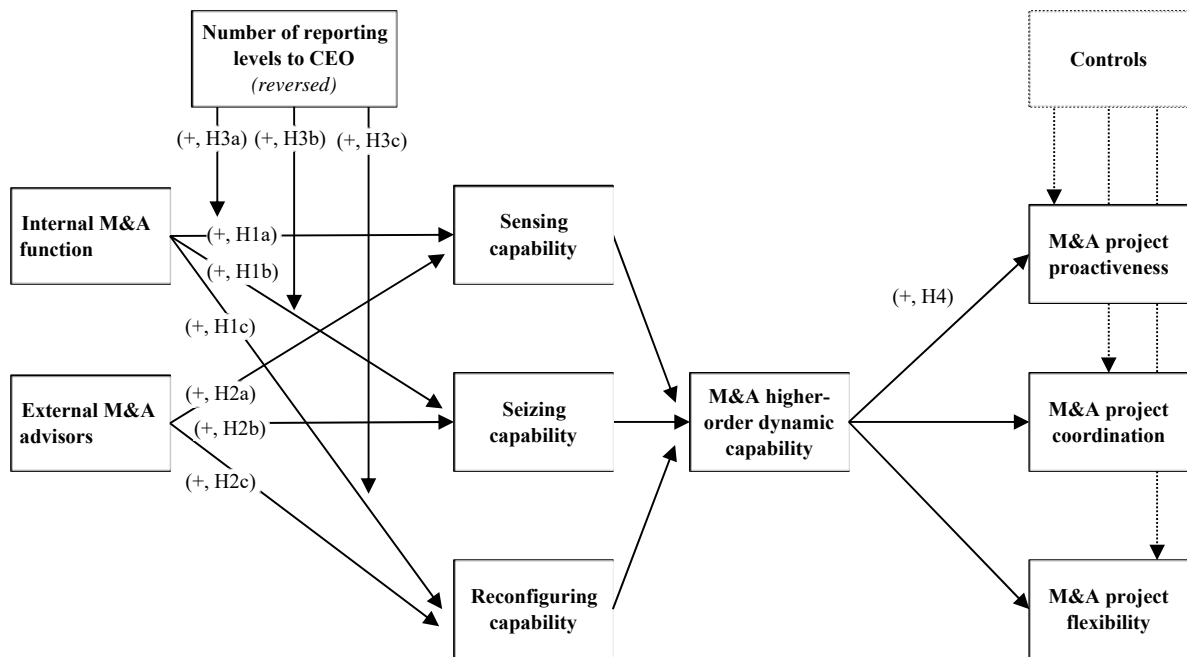
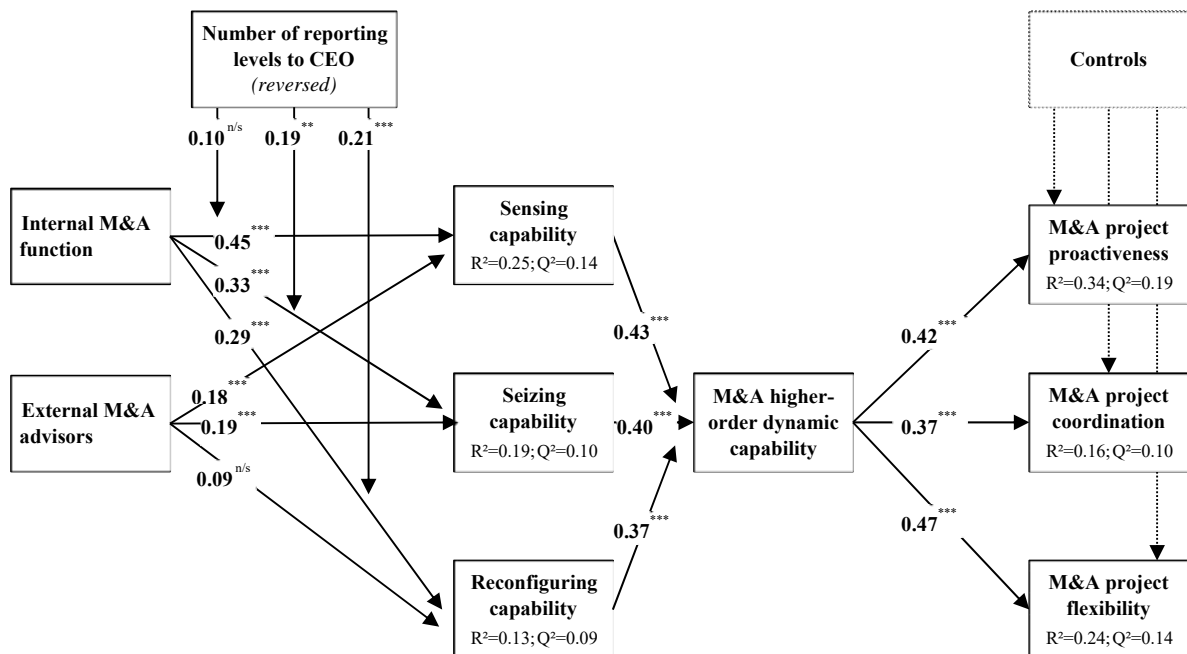


Figure 2: Results of the Research Model with Path Coefficients, R² and Q²



Note: N= 205.

n/s = not significant ($p > 0.10$).

* Significant at $p < 0.10$.

** Significant at $p < 0.05$.

*** Significant at $p < 0.01$.

APPENDIX A: Reflective Measurement Items and Loadings

Construct (based on or adapted from)	Measurement items	Loadings
Internal M&A function (Schilke & Goerzen, 2010)	In our firm, there ...	
	1. ... is a great deal of support for our M&A management through one central unit which is only dedicated to M&A.	0.88
	2. ... is one or more departments primarily dedicated to the management of M&A projects.	0.86
	3. ... are some employees primarily dedicated to the management of M&A projects.	0.71
External M&A advisors (Westphal, 1999; Andrews & Smith, 1996)	1. We have interacted very closely with external advisors in our most recent M&A processes.	0.75
	2. We most generally solicit assistance by external advisors during an M&A project's initiation and execution.	0.75
	3. External advisors are always a sounding board/ advisory body on M&A issues for our firm.	0.88
	4. External advisors often provide advice and counsel in M&A discussions also outside of sold projects.	0.87
M&A higher-order dynamic capability (Wilden et al., 2013)	<i>Sensing capability</i>	
	1. We regularly participate in professional meetings and conferences on M&A topics.	0.81
	2. We participate frequently in external presentations/meetings on M&A topics.	0.80
	3. We have extensive contacts with banks and other M&A advisors.	0.74
	4. We emphasize an active network of contacts with M&A managers of other companies.	0.79
	5. We actively search for and monitor the development of M&A industry standards / best practices.	0.79
	<i>Seizing capability</i>	
	In my M&A organization, we ...	
	1. ...constantly invest in improving our M&A management.	0.80
	2. ...quickly adopt the best practices in our industry sector.	0.80
	3. ...respond to possible improvements in our M&A management which are pointed out by employees.	0.80
	4. ...change our M&A practices when project feedback gives us a reason to change.	0.76
	<i>Reconfiguring capability</i>	
	How often have you carried out the following adjustments to your M&A work within the last 5 years?	
	1. Implementation of new kinds of M&A approaches and management methods.	0.88
	2. New or substantially changed M&A strategies.	0.83
	3. Substantial renewal and adjustments of M&A project structures and processes.	0.84
	4. New or substantially changed ways of our M&A work	0.91
M&A project proactiveness (Schilke & Goerzen, 2010)	1. We always strive to preempt our competition when entering M&A opportunities.	0.73
	2. We always take the initiative in approaching firms with M&A proposals.	0.84
	3. Compared to our competitors, we are far more proactive and responsive in finding and "going after" M&A opportunities.	0.81
	4. We actively monitor our environment to identify M&A opportunities within a systematic and proactive deal sourcing.	0.86
M&A project coordination (Hoegl et al., 2004)	1. Cross-functional processes and activities are well coordinated with other involved departments.	0.86
	2. Duplicated and overlapping activities of different departments are successfully avoided.	<i>eliminated</i>
	3. We closely harmonize the work between different departments.	0.83
	4. Conflicts or inefficiencies between departments are settled quickly.	0.88
	5. Discussions between the involved departments are conducted efficiently and constructively.	0.90
M&A project flexibility (Gibson & Birkinshaw, 2004; Schilke & Goerzen, 2010)	Our M&A project management...	
	1. ...always enables us to adjust established structures/processes to improve M&A project outcome.	0.88
	2. ...allows to challenge and adjust outmoded traditions/practices/decisions until M&A projects' late stage.	0.81
	3. ...is flexible enough to allow us to respond quickly to changing circumstances.	0.83
	4. ...evolves rapidly in response to shifts in our M&A project goals / priorities.	0.82
Company size (Trichterborn et al., 2015)	1. What turnover achieved your business in the last financial year (in million euros)?	0.96
	2. How many employees (full-time equivalents) work currently in your company?	0.92

APPENDIX B: Hypotheses Testing and Controls

Path from	to	Results	Path coefficients (β)	T Statistics	
Internal M&A function	► Sensing capability	H1a Supported	0.45***	7.832	
	Seizing capability	H1b Supported	0.33***	5.283	
	Reconfiguring capability	H1c Supported	0.29***	4.433	
External M&A advisors	► Sensing capability	H2a Supported	0.18***	2.894	
	Seizing capability	H2b Supported	0.19***	3.187	
	Reconfiguring capability	H2c Not supported	0.09 ^{n/s}	1.255	
Number of reporting levels to CEO	► Impact of an internal M&A function on...	<i>Sensing</i> H3a Not supported	0.10 ^{n/s}	1.472	
	<i>Seizing</i>	H3b Supported	0.19**	2.478	
	<i>Reconfiguring</i>	H3c Supported	0.21***	2.777	
M&A higher-order dynamic capability	► M&A project proactiveness	H4 Supported	0.42***	7.013	
	M&A project coordination	H4 Supported	0.37***	5.188	
	M&A project flexibility	H4 Supported	0.47***	7.615	
Controls	<i>M&A project proactiveness</i>	<i>M&A project coordination</i>	<i>M&A project flexibility</i>		
	β	T	β	T	
M&A experience	0.22***	3.209	0.08 ^{n/s}	1.276	
Firm size	-0.35***	5.107	-0.08 ^{n/s}	0.949	
Industry: Consumer & retail	0.24 ^{n/s}	0.958	-0.06 ^{n/s}	0.498	
Industry: Energy & utilities	0.04 ^{n/s}	0.216	-0.13 ^{n/s}	1.247	
Industry: Health care	0.30 ^{n/s}	1.390	-0.11 ^{n/s}	1.038	
Industry: Other industrials	0.09 ^{n/s}	0.341	-0.20 ^{n/s}	1.480	
Industry: Materials, engineering & construction	0.23 ^{n/s}	0.852	-0.18 ^{n/s}	1.327	
Industry: TMT	0.13 ^{n/s}	0.468	-0.16 ^{n/s}	1.177	
Second-order formative construct					
Sensing capability	► M&A higher-order dynamic capability		0.43***	24.671	
Seizing capability			0.40***	30.744	
Reconfiguring capability			0.37***	22.316	
Predictive relevance			R ²	R ² Adj.	Q ²
Sensing capability			0.25	0.24	0.14
Seizing capability			0.19	0.17	0.10
Reconfiguring capability			0.13	0.11	0.09
M&A project proactiveness			0.34	0.31	0.19
M&A project coordination			0.16	0.12	0.10
M&A project flexibility			0.24	0.20	0.14

a: N = 205.

n/s = not significant (p > 0.10).

* Significant at p < 0.10.

** Significant at p < 0.05.

*** Significant at p < 0.01.

APPENDIX C: ICCs^a (1) for Matched Pair of First and Second Respondent

Variable pair	ICC (1)
Perf_1: Meeting M&A process efficiency parameters.	0.53
Perf_2: Meeting overall M&A transaction objectives.	0.54
Perf_3: Meeting overall M&A process quality parameters.	0.46
Perf_4: Dealing with M&A process obstacles.	0.46
Perf_5: Meeting budget expectations.	0.49 ^b
Perf_6: Meeting time expectations.	0.61 ^b
Perf_7: Meeting staffing / resource allocation goals.	0.45
Perf_8: Meeting internal stakeholder satisfaction objectives.	0.62
Perf_9: Meeting external stakeholder satisfaction objectives (customers, suppliers, partners, the public, etc.).	0.53

a: Intraclass correlation coefficients. b: Indicator eliminated at later stage.